

Rabbit Myc Polyclonal Antibody | anti-Myc antibody

Phospho-Myc (Ser62) Antibody

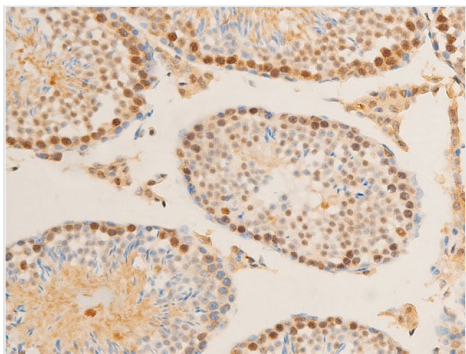
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA30965	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA

PRODUCT SYNONYMS

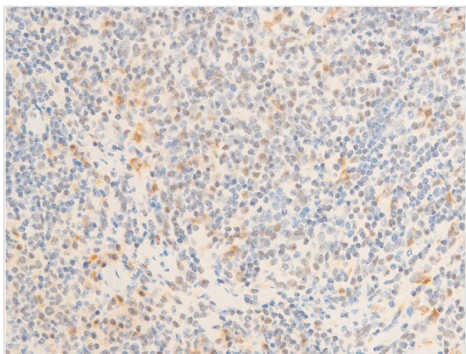
Myc; Polyclonal Antibody; Phospho-Myc (Ser62) Antibody; AU016757; Avian myelocytomatosis viral oncogene homolog; bHLHe39; c Myc; Class E basic helix-loop-helix protein 39; MRTL; Myc protein; Myc proto oncogene protein; Myc proto-oncogene protein; myc-related translation/localization regulatory factor; MYC_HUMAN; Myc2; MYCC; Myelocytomatosis oncogene; Niard; Nird; Oncogene Myc; OTTHUMP00000158589; Proto-oncogene c-Myc; Protooncogene homologous to myelocytomatosis virus; RNCMYC; Transcription factor p64; Transcriptional regulator Myc-A; V-Myc avian myelocytomatosis viral oncogene homolog; v-myc myelocytomatosis viral oncogene homolog (avian); anti-Myc antibody

PRODUCT SPECIFICATIONS

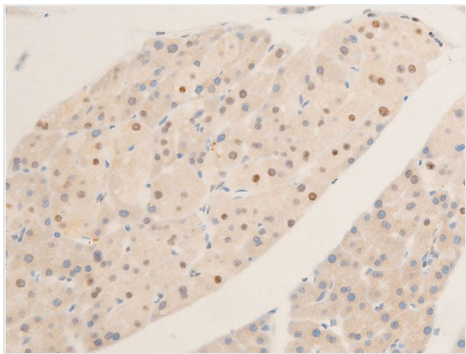
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-Myc (Ser62) antibody detects endogenous levels of Myc only when phosphorylated at Serine 62
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho-and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	454
Applicable Applications for anti-Myc antibody	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA
Application Notes	WB: 1:500-1:2000 IHC: 1:50-1:200 IF/ICC: 1:100-1:500
Immunogen	A synthesized peptide derived from human Myc around the phosphorylation site of Serine 62
Subcellular Location	Nucleus > Nucleoplasm. Nucleus > Nucleolus.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated
Epitope	Phospho Ser62
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



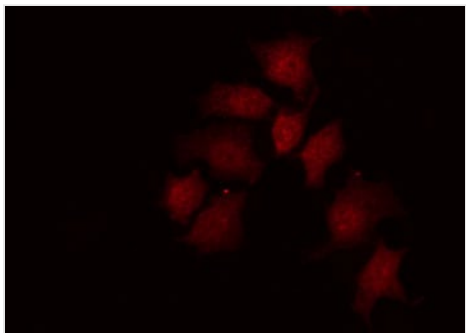
IHC (Immunohistochemistry)
AAA30965 at 1/100 staining mouse testis tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



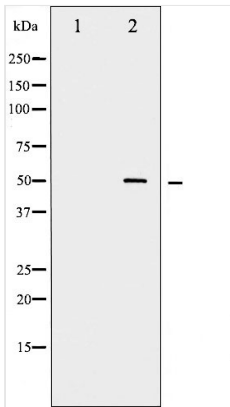
IHC (Immunohistochemistry)
AAA30965 at 1/100 staining mouse spleen tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



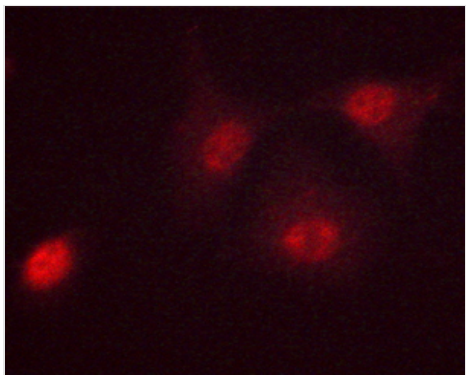
IHC (Immunohistochemistry)
AAA30965 at 1/100 staining mouse pancreas tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IF (Immunofluorescence)
AAA30965 staining 293 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of Myc phosphorylation expression in Forskolin treated 293 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)
AAA30965 staining HeLa cells treated with Forskolin 40nM 30' by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37 degree C. The primary antibody was diluted 1/400 and incubated with the sample for 1 hour at 37 degree C. A Alexa Fluor 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-Myc antibody	Description: Myc a proto-oncogenic transcription factor that plays a role in cell proliferation, apoptosis and in the development of human tumors.. Seems to activate the transcription of growth-related genes. Function: Transcription factor that binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3'. Activates the transcription of growth-related genes. Binds to the VEGFA promoter, promoting VEGFA production and subsequent sprouting angiogenesis (PubMed:24940000). Subunit Structure: Efficient DNA binding requires dimerization with another bHLH protein. Binds DNA as a heterodimer with MAX (PubMed:9680483). Interacts with TAF1C and SPAG9. Interacts with PARP10. Interacts with KDM5A and KDM5B. Interacts (when phosphorylated at Thr-58 and Ser-62) with FBXW7(PubMed:25775507, PubMed:17558397). Interacts with PIM2. Interacts with RIOX1. The heterodimer MYC:MAX interacts with ABI1; the interaction may enhance MYC:MAX transcriptional activity. Interacts with TRIM6 (By similarity). Interacts with NPM1; the binary complex is recruited to the promoter of MYC target genes and enhances their transcription (PubMed:25956029). Interacts with CIP2A; leading to the stabilization of MYC (PubMed:17632056). Post-translational Modifications: Phosphorylated by PRKDC. Phosphorylation at Ser-329 by PIM2 leads to the stabilization of MYC (By similarity). Phosphorylation at Ser-62 by CDK2 prevents Ras-induced senescence. Phosphorylated at Ser-62 by DYRK2; this primes the protein for subsequent phosphorylation by GSK3B at Thr-58. Phosphorylation at Thr-58 and Ser-62 by GSK3 is required for ubiquitination and degradation by the proteasome. Ubiquitinated by the SCF(FBXW7) complex when phosphorylated at Thr-58 and Ser-62, leading to its degradation by the proteasome. In the nucleoplasm, ubiquitination is counteracted by USP28, which interacts with isoform 1 of FBXW7 (FBW7alpha), leading to its deubiquitination and preventing degradation. In the nucleolus, however, ubiquitination is not counteracted by USP28 but by USP36, due to the lack of interaction between isoform 3 of FBXW7 (FBW7gamma) and USP28, explaining the selective MYC degradation in the nucleolus (PubMed:25775507, PubMed:17558397). Also polyubiquitinated by the DCX(TRUSS) complex. Ubiquitinated by TRIM6 in a phosphorylation-independent manner (By similarity).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	71774083
NCBI GeneID	4609
NCBI Accession #	NP_002458.2
NCBI GenBank Nucleotide #	NM_002467.5
UniProt Accession #	P01106; P01107; Q14026; A8WFE7
Molecular Weight	Observed: 50 kDa Predicted: 49 kDa
NCBI Official Full Name	myc proto-oncogene protein isoform 1
NCBI Official Synonym Full Names	MYC proto-oncogene, bHLH transcription factor
NCBI Official Symbol	MYC
NCBI Official Synonym Symbols	MRTL; MYCC; c-Myc; bHLHe39
NCBI Protein Information	myc proto-oncogene protein
UniProt Protein Name	Myc proto-oncogene protein
UniProt Gene Name	MYC
UniProt Synonym Gene Names	BHLHE39; bHLHe39

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.